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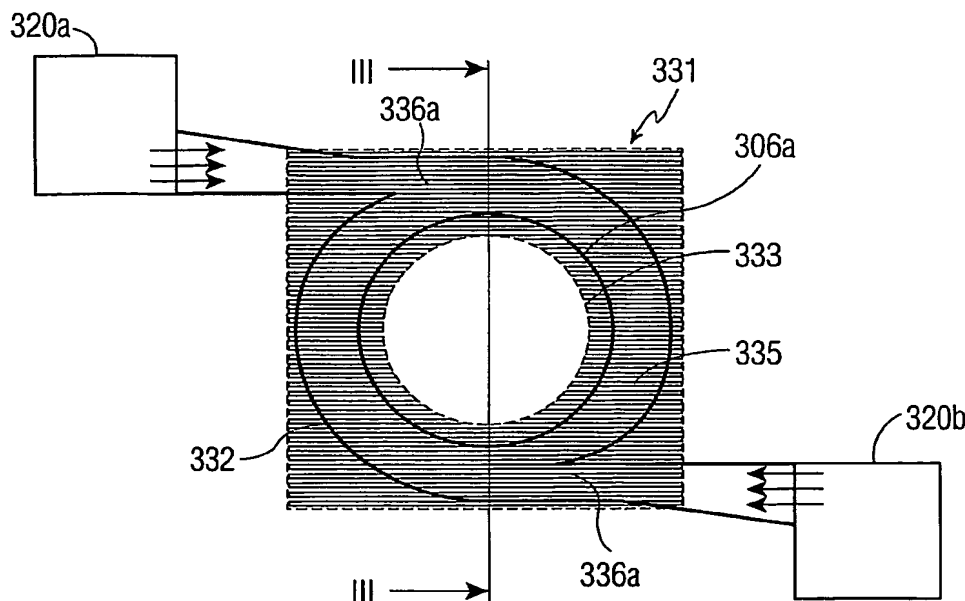
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(54) Title: VORTEX COOLED LAMP



(57) Abstract: A lamp assembly (301) includes a reflector (306) having an opening (334) defined by an upper rim (333) and a concave reflective surface (336) surrounded by the upper rim (333), and an illumination element (304) is mounted within the opening (334) of the reflector (306). An air guide conduit (335) extends around the upper rim (333) of the reflector (306). The air guide conduit (335) has an air inlet (336a, 336b) connected to a blower (320a, 320b) and an air outlet (337) into the opening (334) of the reflector (306). In operation, the blower (320a, 320b) and air guide conduit (335) cooperate to introduce a vortex tangentially into the opening (334) such that the vortex travels down the concave reflective surface (336) of the reflector, thereby cooling the lamp assembly (301).



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